

**CTSD Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO2040a****Specification****CTSD Antibody - Product Information**

Application	<b>E, WB, IHC</b>
Primary Accession	<a href="#">P07339</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1</b>
Calculated MW	<b>44.6kDa KDa</b>

**Description**

This gene encodes a lysosomal aspartyl protease composed of a dimer of disulfide-linked heavy and light chains, both produced from a single protein precursor. This proteinase, which is a member of the peptidase C1 family, has a specificity similar to but narrower than that of pepsin A. Transcription of this gene is initiated from several sites, including one which is a start site for an estrogen-regulated transcript. Mutations in this gene are involved in the pathogenesis of several diseases, including breast cancer and possibly Alzheimer disease.

**Immunogen**

Purified recombinant fragment of human CTSD (AA: 1-100) expressed in E. Coli.

**Formulation**

Purified antibody in PBS with 0.05% sodium azide

**CTSD Antibody - Additional Information**

**Gene ID** 1509

**Other Names**

Cathepsin D, 3.4.23.5, Cathepsin D light chain, Cathepsin D heavy chain, CTSD, CPSD

**Dilution**

E~~1/10000  
WB~~1/500 - 1/2000  
IHC~~1/200 - 1/1000

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

CTSD Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**CTSD Antibody - Protein Information**

**Name** CTSD

**Synonyms** CPSD

**Function**

Acid protease active in intracellular protein breakdown. Plays a role in APP processing following cleavage and activation by ADAM30 which leads to APP degradation (PubMed:<a href="http://www.uniprot.org/citations/27333034" target="\_blank">27333034</a>). Involved in the pathogenesis of several diseases such as breast cancer and possibly Alzheimer disease.

**Cellular Location**

Lysosome. Melanosome. Secreted, extracellular space. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV. In aortic samples, detected as an extracellular protein loosely bound to the matrix (PubMed:20551380)

**Tissue Location**

Expressed in the aorta extracellular space (at protein level) (PubMed:20551380). Expressed in liver (at protein level) (PubMed:1426530).

**CTSD Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)